ate dose constraints are applied to the clinical target volume (CTV), planning target volume (PTV), contralateral lung, heart, spinal cord, esophagus, liver and kidneys. Beam geometry consisted of 8 non-overlapping coplanar beams (mixed 6/10 MV photons). The PTV was prescribed 50 Gy in 25 daily fractions over 5 weeks. Bolus was applied over the scar to ensure adequate skin dose. The plan was optimized in the partially filled TC case. A density override was applied to the TC to simulate the completely filled TC (1 g/cm^3) and completely empty (0 g/cm^3) cases, assuming identically treated plans (same monitor units). The doses to the regions of interest were compared.

Results: Comparing the empty, partially filled and full TC cases respectively, we find: mean CTV dose 53.4. 50.7 and 49.6 Gy, mean PTV dose 53.1, 50.4 and 49.4 Gy; mean contralateral lung dose 8.8, 8.4 and 8.3 Gy; mean heart dose 32.0, 28.4 and 28.5 Gy; max spinal canal dose 50.0, 48.9 and 47.3 Gy; max esophagus dose 56.5, 54.0 and 54.6 Gy; mean liver dose 20.6, 19.8 and 19.9 Gy; mean ipsilateral kidney dose 6.9, 7.1 and 7.1 Gy.

Conclusions: Dosimetric differences between partially filled and full TC are modest, usually within 1 Gy, and, thus, not likely to be of major clinically relevance. In general, the empty and full TC had slightly warmer and cooler doses, respectively, compared to the partially filled TC case but this was not universally true for all organs at risk. The empty TC had the largest dosimetric differences, sometimes exceeding 2 Gy, compared to the other cases and, thus, may warrant further clinical study and caution.

P1-111 **Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3**

Outcome of relatively benign tracheobronchial tumors treated with bronchoscopic therapy

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Background: Bronchoscopic intervention as initial treatment for relatively benign intraluminal lesions has been shown to potentially spare lung parenchyma without compromising long-term outcome, relative to surgical resection.

Aim: To evaluate outcome of bronchoscopic treatment for patients with lipoma, neurofibroma, hamartoma, chondroma, hemangioma, papilloma, granular cell myoblastoma and low-grade mucoepidermoid carcinoma involving the tracheobronchial tree.

Methods: Retrospective review of pathology and bronchoscopy databases between 1992 and 2006 was performed to identify patients with relatively benign airway tumors referred to our hospital for bronchoscopic intervention. Initial clinical work-up included high resolution computed tomography (HRCT) for tumor location and invasion. All patients underwent rigid bronchoscopy for diagnostic and therapeutic indications. Endobronchial electrosurgery followed by mechanical debulking of the intraluminal tumor. Restaging with bronchoscopy and HRCT were carried out 4-6 weeks after bronchoscopic intervention. Patients with extraluminal or residual tumor and distal lung atelectasis were advised for surgery.

Results: We identified 44 patients, 15 females with median age 54 yrs (range 18 -81), who were initially treated bronchoscopically:16 (chondro)hamartomas, 6 mucoepidermoid carcinomas, 6 granular cell myoblastomas, 4 lipomas, 3 papillomas, 3 adenomas, 2 neurofibromas, 1 hemangioma, 1 lymfangioma, 1 leiomyoma and 1 paraganglioma. Thirty-five patients (80%) were curatively treated by bronchoscopic treatment alone (80%). In the remaining nine patients, radical resection was performed. Median follow-up until March 2007 was 38 months (range: 4-152) and there were no complications observed in patients who underwent bronchoscopic treatment. There has been one patient with a recurrence of a hamartoma 20 weeks after bronchoscopic intervention; a segmentectomy was performed.

Conclusion: Bronchoscopic treatment of relatively benign intraluminal tumors in the treacheobronchial tree can be initiated and is a safe alternative for surgery, which can be performed if bronchoscopic treatment initially failed.

P1-112 **Mesothelioma and Other Thoracic Malignancy Posters, Mon, Sept 3**

Surgery for malignant pleural mesothelioma

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Background: Evaluate efficacy of diagnostic measures and surgery for malignant pleural mesothelioma (MPM) and analyse results of treatment.

Matherial and Methods: Form 1992-2005 yy. 138 patients (pts) underwent treatment for morphologicaly proved malignant pleural mesothelioma in Department of Thoracic Surgery and Oncology, Institute Oncology Vilnius University. 113 (81.9%) pts were operated, 25 (18.1%) pts underwent conservative treatment (radiation/chemotherapy). Before operation noninvasive diagnostic procedures were used: X-ray films 138 (100%) pts, X-ray films and chest CT 56 (40.5%) pts, chest CT 62 (44.9%) pts, chest CT/MRI 10 (7.2%) pts and chest ultrasound 10 (7.2%) pts. Invasive diagnostic procedures: VATS - 45 (32.6%) pts, pleural biopsy 82 (59.4%) pts, diagnostic (mini) thoracotomy 11 (7.9%) pts. Stage of the disease: I st. - 17 (12.3%) pts, II st.- 35 (25.3%) pts, III st. - 60 (43.4%) pts and stage IV - 26 (18.8%) pts. 53 pts after surgery were treated using radiation/chemotherapy.

Results: Operation for MPM: pleuropulmonectomy - 68 (60.1%) pts, extented pleuropulmonectomy with pericardium and diafragm resection - 12 (10.6%), parietal pleurectomy - 12 (10.6%), partial pleurectomy with pericardial resection - 11 (9.7%) pts, debulking - 10 (8.8%) pts. Morphology found: epitheliod - 48 (35.7%) pts, sarcomatosus - 53 (38.4%) pts and biphasic - 37 (26.8%) pts. Postoperative complications: bronchial fistulas - 6 (5.3%) pts, chylothorax - 7 (6.1%) pts, hemothorax - 11 (9.7%) pts and injury of simpatic ganglion - 2 (1.7%) pts. 4 (3.5%) pts dead after surgery. Median survival after surgery was 12,0±2 mo., after conservative treatment - 6,0±2 mo. Reccurence of the disease in surgical group ranges from 9.7-17.6% of pts, in conservative group no one pts lived three years.

Conclusions: 1. Surgery for MPM is confident, radical and sufficient method of treatment. 2. Nonradical resections and postoperative chemoradiation prolongs disease free survival and overall survival. 3. Postoperative complications was in 26 (23%) pts, 4 (3.5%) pts dead. 4. Median survival after surgery was 12,0±2 mo., after conservative treatment - 6,0±2 mo. Reccurence of the disease in surgical group ranges from 9.7-17.6% of pts, in concervative group 93%.